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NEW SPECIES OF CERAMBYCIDAE FROM TWIN CAYS, BELIZE (COLEOPTERA)

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Abstract.—New species of Cerambycidae (Coleoptera) from Twin Cays, Belize, associated with mangrove, are described along with a description of the male of *Derancistrus fellerae* Chemsak. New taxa are: *Methia rhizophorae, Ataxia cayensis, Leptostylopsis latus, Styloleptus rhizophorae,* and *Urgleptes ozophagus.*

Key Words: Insecta, Coleoptera, Cerambycidae, Belize

The recent interest in and emphasis on Neotropical natural history has resulted in a great increase in biological investigations on insects. The Cerambycidae, because of their larval habits, are directly affected by the well documented loss of tropical forests (Janzen 1986). For this reason, studies dealing with habits and behavior of immatures and adults will attain increasing importance.

One such study, presently being conducted by C. Feller at Twin Cays, Belize, has produced a number of new species. Twin Cays (16°50′N, 18°06′W), locally called Water Range, is a swampy mangrove island within the Belize Barrier Reef. The island is approximately 1 km in diameter and is 22 km SE of Dangriga (Stann Creek), Dangriga District, Belize. The Cerambycidae present appear to be associated with red mangrove, *Rhizophora mangle* L., black mangrove, *Avicennia germinans* (L.) Stearn, white mangrove, *Laguncularia racemosa* (L.) Gaertn. f., and buttonwood, *Conocarpus erectus* (L.). The beetle genera represented are typical West Indian–Central American groups containing numerous species (Chemsak and Linsley 1982).

In 1983, Chemsak described *Derancistrus fellerae* from Twin Cays from two female specimens. Subsequent collections and rearings have produced additional specimens, including the male, which is described below along with five new species. The new taxa are presented to make their names available for current ecological studies. Types are deposited in the United States Museum of Natural History, Washington, D.C. and paratypes in the Essig Museum of Entomology, University of California, Berkeley.

Derancistrus fellerae Chemsak (Prioninae)

Fig. 1

Derancistrus fellerae Chemsak 1983, Proc. Entomol. Soc. Wash., 85: 714.

Male.—Form moderate-sized, rather slender, tapering posteriorly; integument black, elytra black basally, dark reddish toward apex, femora reddish, narrowly black at apices and bases, tibiae reddish toward apical one-half. Head narrow, front short, deeply impressed, impression extending onto vertex; punctures coarse, subconfluent, becoming sparse on neck; pubescence sparse, recurved; antennae serrate, extending to

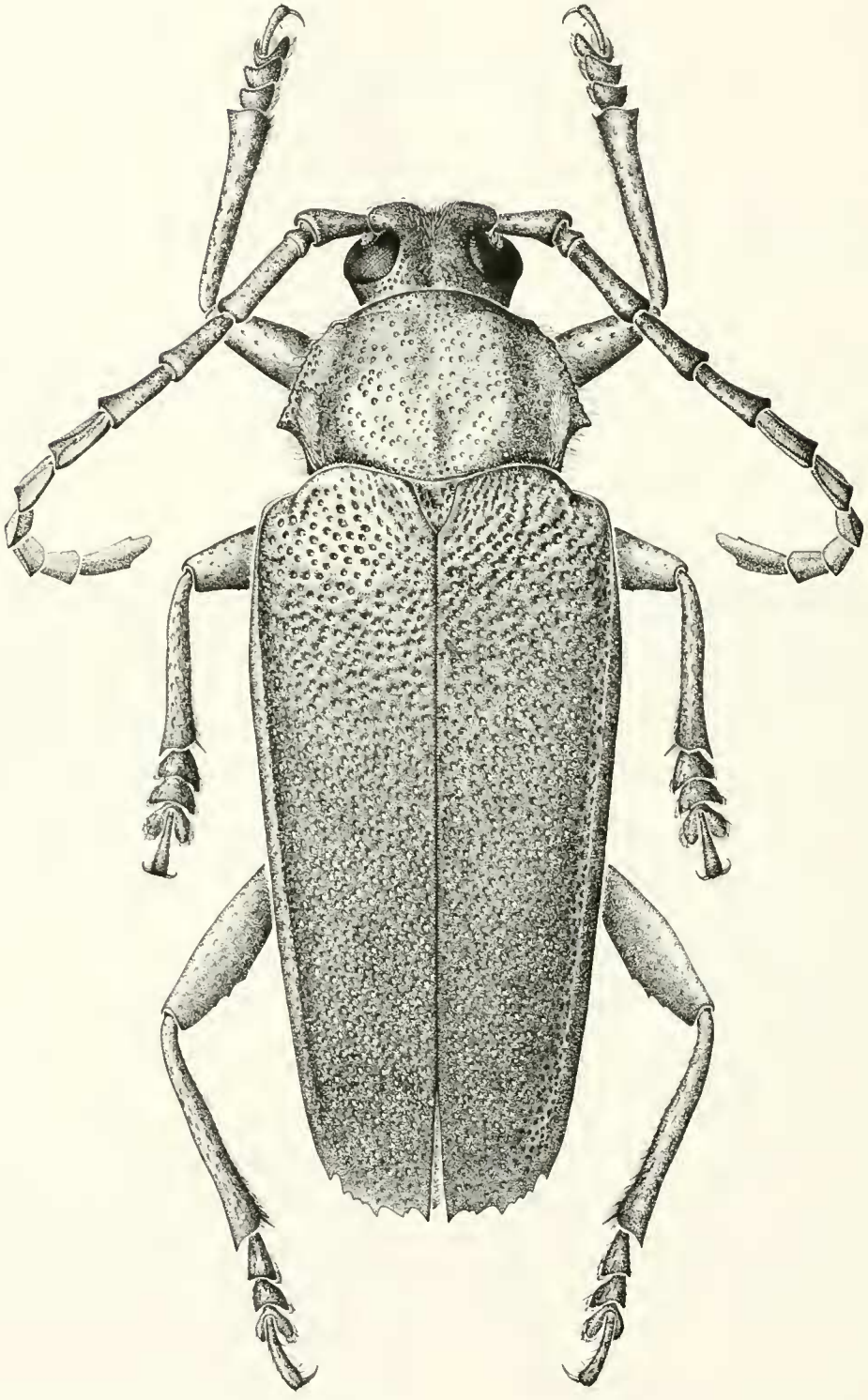

Fig. 1. *Derancistrus fellerae* Chemsak, male.

about third abdominal segment, segments broad, flattened, basal segments sparsely, shallowly punctate, poriferous area small on third segment, areas increasing to sixth segment, segments from seventh entirely opaque, third segment longer than first, fourth subequal to first, eleventh longer than tenth. Pronotum broader than long, sides gradually expanding back from apex to behind middle then narrowing to base, margins crenulate, angles dentate; disk shallowly impressed at middle behind apical margin; punctures irregular, middle with irregular glabrous areas; sides behind dentate angles with a small patch of whitish recumbent pubescence; prosternum sparsely pubescent; meso- and metasternum with patches of white appressed pubescence at sides. Elytra about twice as long as broad; punctures at base coarse, confluent, becoming finer toward apex; apices serrated. Legs slender, sparsely punctate and pubescent. Abdomen with sternites narrowly glabrous on posterior margins; last sternite emarginate at apex. Length, 18 mm.

The male is much smaller and more slender than the female. The antennae are longer with opaque outer segments, and pubescent patches are lacking along the anterior margins and base of the pronotum.

Larvae of this species have been collected from the wood of red mangrove, black mangrove, white mangrove, and buttonwood.

One specimen is deposited in the USNM and the other in the Essig Museum.

Methia rhizophorae Chemsak & Feller, New Species (Methiini)

Female.—Form slender, rather elongate, elytra dehiscent toward apex; color fuscus, head, pronotum and appendages at least partially orange-brown, elytra often paler along suture at basal one-half. Head slightly wider than pronotum; eyes separated on vertex by less than diameter of third antennal segment, separated beneath by more than diameter of scape, lobes of eyes connected by a single row of facets; front finely asperate; antennae extending about four segments beyond body, scape lacking an apical tooth, basal segments dark apically, pubescence rather short, dense, suberect; neck deeply, narrowly impressed medially behind eyes. Pronotum broader than long, sides broadly rounded; apex and base transversely impressed; disk convex, medially impressed before basal margin; punctures finely scabrous; pubescence pale, dense, subdepressed, long; stridulatory plate of mesonotum not grooved; prosternum narrowly impressed at apex, finely plicate. Elytra extending to second abdominal segment; each elytron vaguely bicostate; punctures moderately coarse, shallow, subconfluent; pubescence pale, moderately dense, suberect. Legs moderate; femora finely, transversely plicate; pubescence moderately dense. Abdomen with last sternite deeply v-shaped at apex, margins with a row of setae. Length, 10–11 mm.

Male.—Form small, slender; color brownish, antennae pale orange-brown on basal segments, scape infuscated over apical two-thirds, elytra pale at middle and at apex. Head with front asperate; eyes separated above by less than diameter of third antennal segment, beneath by more than diameter of scape, lobes connected by a single row of facets; antennae extending almost five segments beyond body, segments densely clothed with short erect and suberect pubescence. Elytra brownish basally with vague brownish vittae extending down middle of disk to preapical depressions to form transverse dark spots; punctures fine, dense, confluent basally and contiguous toward apex; pubescence pale, short, subdepressed. Abdomen not modified. Length, 6–7 mm.

Holotype ♀, allotype, from Twin Cays, Belize, 4 June 1985, 21 May 1986, in red mangrove (C. Feller); paratypes, 1 ♂, 21 May 1986; 2 ♀, 2 June 1985, 21 May 1986, from red mangrove.

This species resembles *M. constricticollis* Schaeffer from Texas and Mexico by the

coloration of the antennae. The two differ by the coarsely punctate head, the eye lobes connected by 2–3 facets and by the feebly rugose elytra in *M. constricticollis.*

The female paratypes are slightly paler in color with a pale vitta along the basal half of the suture of the elytra.

Ataxia cayensis Chemsak & Feller, New species (Ataxiini)

Fig. 2

Male.—Form moderate-sized, slightly tapering posteriorly; integument piceous, appendages slightly reddish-piceous; pubescence moderately dense, grayish, fine, appressed. Head with front rather coarsely, deeply punctate, punctures well separated, pubescence appressed, interrupted by punctures, recurved setae arising from each puncture with longer erect hairs around eyes and mouthparts; vertex with a median line, sparsely punctate; antennae about as long as body, segments from fourth paler at bases, segments finely pubescent, long, erect hairs beneath numerous, scape with a fine, apical cicatrix, third segment subequal to first, fourth longer than third. Pronotum slightly broader than long, lateral tubercles small; disk very coarsely, irregularly punctate, medially shallowly impressed behind middle; pubescence mottled, appressed, with recurved setae arising from punctures; prosternum coarsely, sparsely punctate, rather sparsely pubescent; mesosternum with intercoxal process arcuately declivous; metasternum with pubescence interrupted by small glabrous spots. Elytra about twice as long as broad; disk shallowly costate with coarse punctures arranged linearly down intervals, punctures becoming finer toward apex; pubescence fine, mottled, with whitish flecks of denser pubescence interspersed, suberect hairs short; apices subtruncate. Legs moderately densely pubescent, pubescence interrupted by small spots. Abdomen moderately densely pubescent, small glabrous spots numerous; last sternite very shallowly emarginate at apex. Length, 11 mm.

Female.—Form similar to male. Antennae slightly shorter than body. Abdomen with last sternite shallowly impressed, truncate at apex. Length, 10.5–12 mm.

Holotype ♂ and one ♀ paratype from Twin Cays, Dangriga Dist., Belize, 4–5 June 1985. "Fogging Proj. Black Mang." (T. L. Erwin, L. L. Sims, W. N. Mathis); one female paratype, Twin Cays, emerged 29 May 1986, from larva from red mangrove twig terminal (C. Feller); one ♀ paratype, Twin Cays, mudflat nr. Lairchan, 15–19 January 1987 (W. N. Mathis, C. Feller).

This species is distinctive by its small size, dark integument with paler appendages, and fine, dense pubescence of the elytra with small whitish flecks interspersed.

The antennae and legs of the first paratype are paler reddish than those of the type.

Leptostylopsis latus Chemsak & Feller, New Species (Acanthocini)

Fig. 3

Female.—Form moderate-sized, broad; integument reddish brown, underside partially infuscated; pubescence dense, short, fine, appressed, pale and dark brownish. Head with front about as broad as long, micropunctate with larger punctures sparsely interspersed, pubescence fine, pale brownish, interrupted by glabrous spots; genae as long as lower eye lobes; upper eye lobes small, separated by diameter of antennal scape; antennae a little longer than body, segments dark annulate at bases and apices, segments to fifth with small dark spots, third segment slightly longer than first, fourth shorter than first. Pronotum much broader than long, sides tumid, vaguely tuberculate slightly behind middle; disk with five shallow calluses, three median more prominent; punctures around median callus sublinearly arranged between transverse rugosities, punctures at sides finer, scattered; pubescence fine, interrupted by punctures, broadly dark medially, small dark spots interspersed over remaining surface; prosternum finely pubescent, intercoxal process

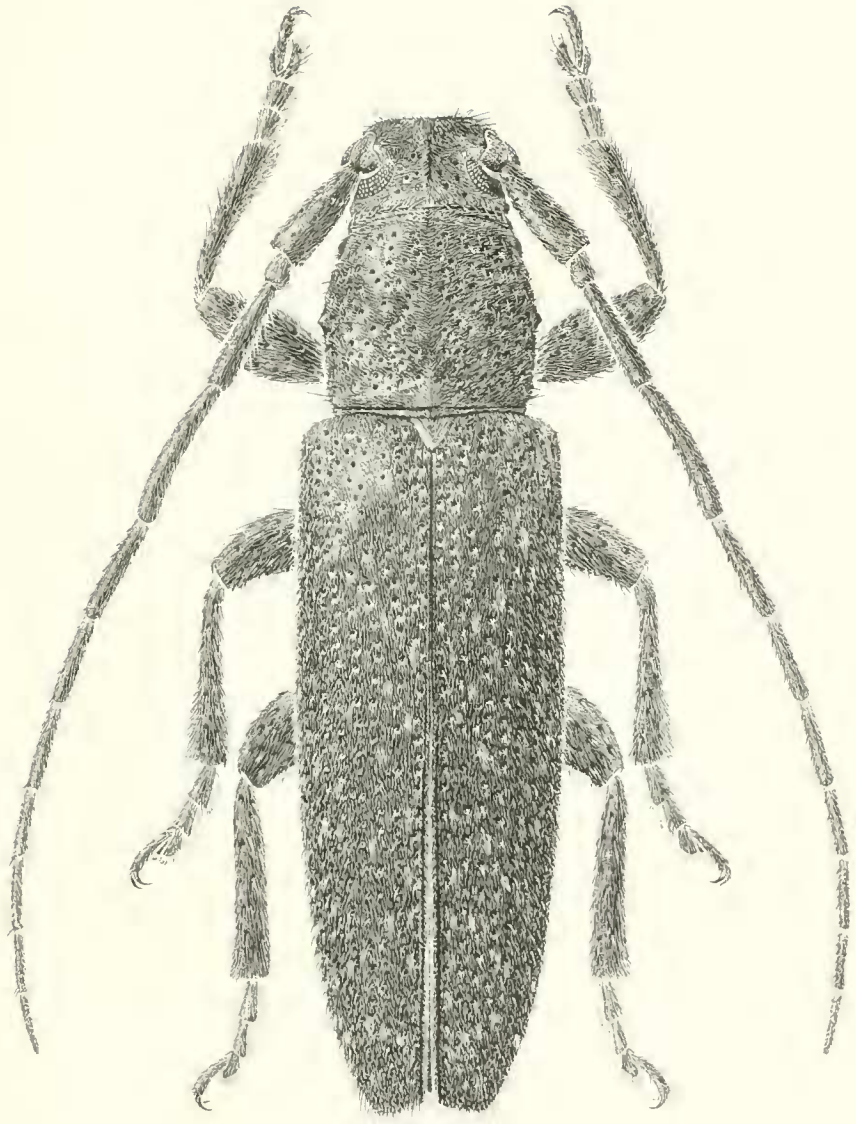

Fig. 2. *Ataxia cayensis* Chemsak & Feller, male.

more than one-half as broad as coxal cavity; meso- and metasternum with darker spots, mesosternal process broader than coxal cavity. Elytra about 1½ times as long as broad, tapering apically; basal gibbosities shallow, impression behind deep; disk with a few tufted tubercles down costae, basal ones elongate; pubescence dense, appressed, brownish, each side with a dark lateral vitta extending from humerus to a little behind middle, basal impressions dark, apical one-half with dark linear markings on suture and on disk before apex, tubercles pale pubescent; apices narrowly, shallowly emarginate truncate. Legs robust, femora with small spots; tibiae dark biannulate; tarsi dark, first segments basally and claws pale. Abdomen thinly pubescent, sternites dark along apical

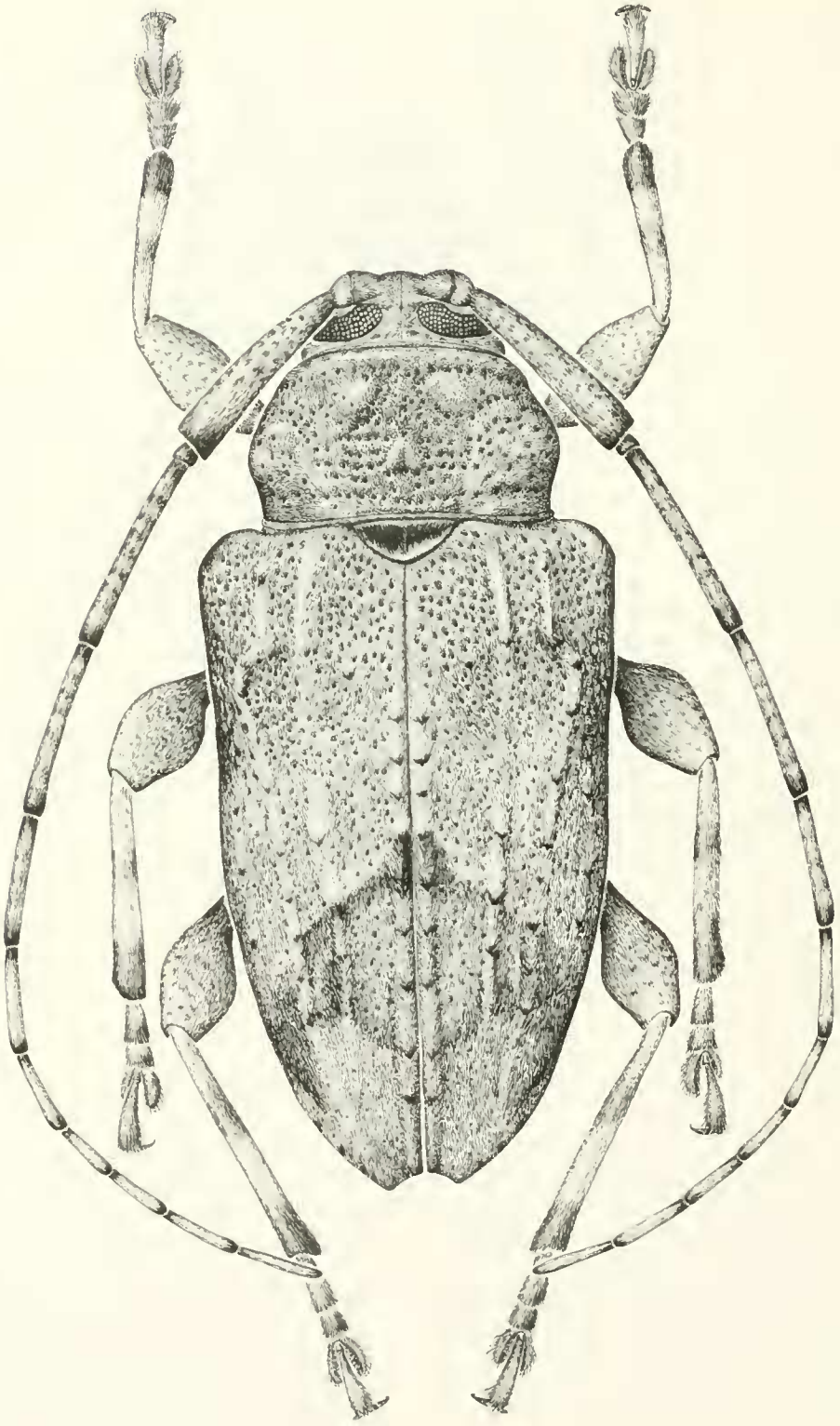

Fig. 3. *Leptostylopsis latus* Chemsak & Feller, female.

margins; last sternite slightly elongate, apex narrowly truncate. Length, 13 mm.

Holotype ♀ from Twin Cays, Belize, 5 May 1985 (26–85), in red mangrove (C. Feller and Canupp).

The broad form and distinctive punctation and rugosities of the pronotum make this species distinctive. The type is slightly teneral, probably making the integumental coloration paler than in fully mature specimens.

Styloleptus rhizophorae Chemsak & Feller, New Species (Acanthocini)

Fig. 4

Male.—Form small, subdepressed; integument pale reddish-brown, head infuscated, antennae with scape dark dorsally, other segments dark annulate at apices, legs with tibiae broadly dark biannulate, femora with clavate portion dark on outside and inside, elytra with dark fasciae and an irregularly margined, oblique whitish fascia on each side at middle; pubescence very short, depressed, grayish and black. Head with front convex, micropunctate, pubescence short, depressed, mouthparts with several erect setae; antennal tubercles moderate, widely divergent; vertex impressed between eyes, convex behind; eyes coarsely faceted, upper lobes separated by more than width of lobes, lower lobes almost twice as long as genae; antennae rather short, extending about four segments beyond elytra, scape barely attaining middle of pronotum, third segment longer than first, fourth equal to first, segments dark mottled, dark annulate at apices, pubescence very fine, depressed. Pronotum almost twice as broad as long, sides with broadly rounded calluses behind middle; disk with three small calluses, one median and one on each side near apical margin; punctures fine, scattered, linear on basal impression; basal transverse impression broad, extending onto sides; pubescence fine, appressed, variegated gray and brownish, sides at base with two long erect setae; prosternum with intercoxal process plane, slightly narrower than coxal cavities; mesosternum with intercoxal process almost plane, as broad as coxal cavities, broader than prosternal process; metasternum finely gray pubescent, pubescence interrupted by small spots. Elytra about 1.75 times longer than basal width, sides slightly expanding behind middle then tapering at about apical one-fourth; basal calluses low, not tufted, basal impression rather small, extending down outside and below calluses; costae vague; punctures moderately coarse basally, becoming finer and sparser toward apex; pubescence fine, depressed, middle with a broad, irregularly margined, oblique, whitish vitta which extends back from suture to lateral margins, sides behind humeri with black vittae, an irregular dark vitta present behind oblique whitish vitta, surface with a few small, black spots particularly along suture; apices narrowly, obliquely truncate. Legs short; femora clavate; pubescence fine, appressed, mottled grayish and brownish; metatibiae with an external sinus. Abdomen finely punctate and pubescent; fifth sternite slightly longer than fourth, subtruncate at apex. Length, 5.5 mm.

Female.—Form similar. Antennae slightly shorter. Abdomen with fifth sternite much longer than fourth, narrowly, shallowly emarginate at apex. Length, 6 mm.

Holotype ♂ from Twin Cays, emerged from red mangrove 14 July 1986 (C. Feller) (twigs collected 26 May 1986). One ♀ paratype, same data, emerged 1 July 1986.

The whitish vitta of the elytra is more pronounced in the male. In the female this band does not extend to the margins and a few narrow pale vittae extend forward and back on the disk. The suture is also narrowly pale.

The previously described species of *Styloleptus* are West Indian with two extending into the United States. This species is the first of this genus from the Central American mainland area. The possibility does exist, of course, that the placement of this species into *Styloleptus* is incorrect. Such

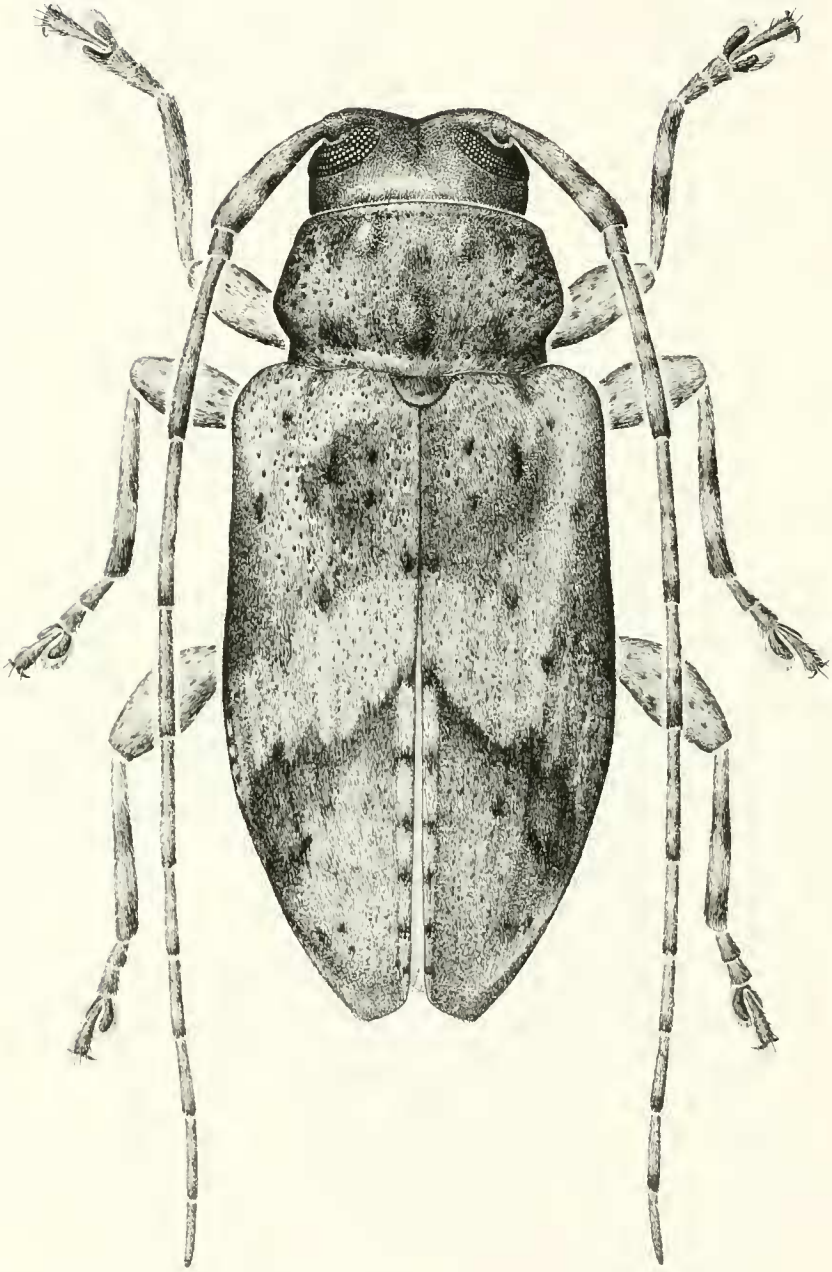

Fig. 4. *Styloleptus rhizophorae* Chemsak & Feller, male.

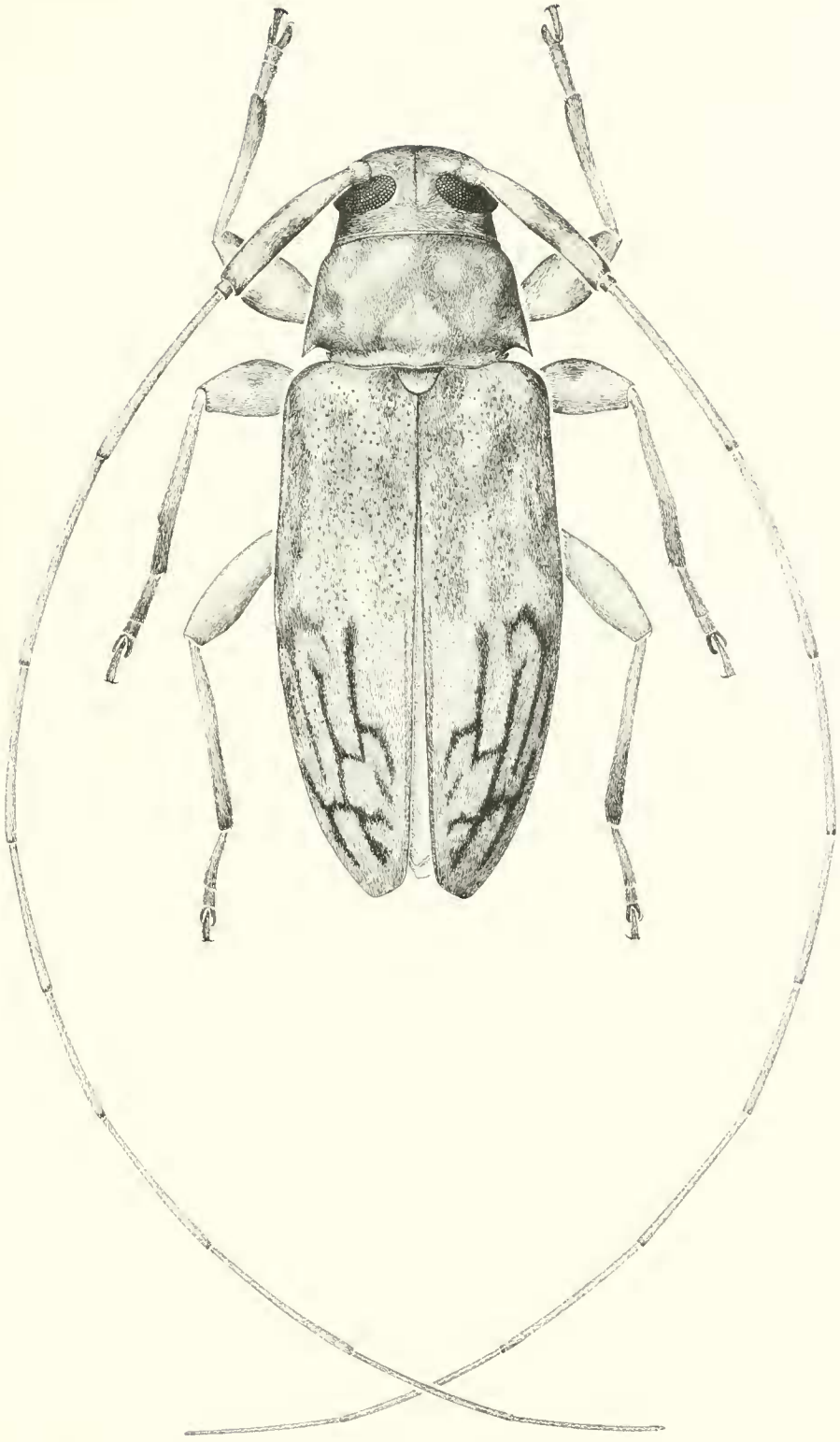

Fig. 5. *Urgleptes ozophagus* Chemsak & Feller, female.

problems must be resolved by a generic revision of the very large and taxonomically difficult tribe Acanthocini.

Urgleptes ozophagus Chemsak & Feller, New Species (Acanthocini)

Fig. 5

Female.—Form small, depressed; integument pale reddish brown, antennae yellowish brown and dark, legs yellow brown, tarsi and most of tibiae dark, elytra dark vittate basally at sides and with narrow, connected, dark vittae on apical one-half; pubescence very fine, appressed, grayish and dark brown. Head with front slightly convex, broad, micropunctate, pubescence short, pale, appressed, margin of frons with several long, suberect setae near sides; vertex convex, medially impressed before inner eye margins; eyes with lower lobes rounded; genae slightly shorter than lower eye lobes; antennae extending about five segments beyond elytra, scape shorter than third segment, fourth longer than third, scape broadly dark annulate, segments very finely pubescent, third segment with several short, subdepressed, dark setae beneath. Pronotum broader than long; disk lightly convex, densely micropunctate, basal impression with a row of fine, deep punctures; pubescence pale, fine, appressed; prosternum with intercoxal process narrow; mesosternum with intercoxal process narrow; metasternum densely clothed with pale, appressed pubescence. Elytra about twice as long as broad, sides tapering behind middle; disk feebly impressed at basal one-fourth; punctures moderately coarse, dense, becoming obsolete near apex; pubescence short, fine, grayish, appressed, sides with broad dark vittae extending from base to about middle, apical one-half with dark, narrow reticulate-like vittae; apices narrowly obliquely truncate. Legs finely pubescent; femora pale with infuscated patches near apices; tibiae pale basally, dark over apical two-thirds; tarsi dark. Abdomen pale, finely densely pubescent; fifth sternite twice as long as fourth, apex narrowly, shallowly emarginate. Length, 5.5 mm.

Holotype ♀ from Twin Cays, emerged 15 July 1986, from twig terminal of red mangrove (C. Feller). Two ♀ paratypes, Twin Cays, N. shore of W. Island, 20 January 1987, on *R. mangle* (W. Mathis) and Weather Station, 21 January 1987, ex *R. mangle*.

The small size and reticulate-like vittae on the apical half of the elytra make this species distinctive.

Acknowledgments

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